

# Ferro Pp TPP40AC86BK

Polypropylene Homopolymer

LyondellBasell Industries

Engineering Plastics

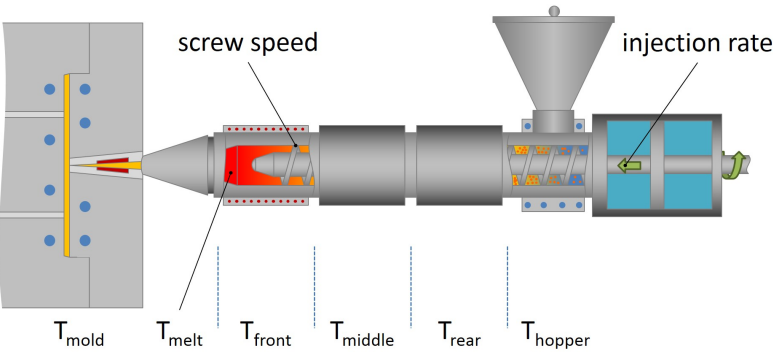
| General                |                              |               |
|------------------------|------------------------------|---------------|
| Filler / Reinforcement | • Talc, 37% Filler by Weight |               |
| Additive               | • Heat Stabilizer            |               |
| Features               | • Heat Stabilized            | • Homopolymer |
| Appearance             | • Black                      |               |
| Forms                  | • Pellets                    |               |
| Processing Method      | • Injection Molding          |               |

| Physical                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|-------------------------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity                | 1.24                    | 1.24 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 Kg) | 7.0 g/10 min            | 7.0 g/10 min           | ASTM D1238  |
| Mechanical                                | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Tensile Strength (73°F (23°C))            | 4600 psi                | 31.7 MPa               | ASTM D638   |
| Tensile Elongation (Break, 73°F (23°C))   | 5.0 %                   | 5.0 %                  | ASTM D638   |
| Flexural Modulus                          |                         |                        | ASTM D790   |
| 1% Secant : 73°F (23°C)                   | 396000 psi              | 2730 MPa               |             |
| Tangent : 73°F (23°C)                     | 522000 psi              | 3600 MPa               |             |
| Flexural Strength (73°F (23°C))           | 7200 psi                | 49.6 MPa               | ASTM D790   |
| Impact                                    | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Notched Izod Impact (73°F (23°C))         | 0.50 ft·lb/in           | 27 J/m                 | ASTM D256   |
| Unnotched Izod Impact (73°F (23°C))       | 4.4 ft·lb/in            | 230 J/m                | ASTM D4812  |
| Gardner Impact (73°F (23°C))              | 4.50 in·lb              | 0.508 J                | ASTM D5420  |
| Hardness                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Durometer Hardness (Shore D)              | 74                      | 74                     | ASTM D2240  |
| Thermal                                   | Nominal Value (English) | Nominal Value (SI)     | Test Method |
| Deflection Temperature Under Load         |                         |                        | ASTM D648   |
| 66 Psi (0.45 Mpa), Unannealed             | 265 °F                  | 129 °C                 |             |
| 264 Psi (1.8 Mpa), Unannealed             | 160 °F                  | 71.1 °C                |             |



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| Injection               | Nominal Value (English) | Nominal Value (SI) |
|-------------------------|-------------------------|--------------------|
| Drying Temperature      | 176 °F                  | 80 °C              |
| Drying Time             | 2.0 to 3.0 hr           | 2.0 to 3.0 hr      |
| Rear Temperature        | 400 to 410 °F           | 204 to 210 °C      |
| Middle Temperature      | 410 to 415 °F           | 210 to 213 °C      |
| Front Temperature       | 415 to 420 °F           | 213 to 216 °C      |
| Nozzle Temperature      | 420 to 425 °F           | 216 to 218 °C      |
| Processing (Melt) Temp  | 428 to 500 °F           | 220 to 260 °C      |
| Mold Temperature        | 86 to 140 °F            | 30 to 60 °C        |
| Back Pressure           | 20.0 to 50.0 psi        | 0.138 to 0.345 MPa |
| Screw Speed             | 100 to 150 rpm          | 100 to 150 rpm     |
| Clamp Tonnage           | 2.0 to 3.0 tons/in²     | 2.8 to 4.1 kN/cm²  |
| Screw L/D Ratio         | 20.0:1.0                | 20.0:1.0           |
| Screw Compression Ratio | 2.0:1.0                 | 2.0:1.0            |

Notes

These are typical property values not to be construed as specification limits.

